A SYSTEM FOR COVERABILITY ANALYSIS

ABSTRACT

A method for performing coverability analysis in software, including performing a static analysis of software under test (SUT) so as to identify a plurality of dominating blocks in the SUT, formulating respective coverability tasks for the dominating blocks of the SUT and generating rules regarding behavior of the SUT corresponding respectively to the coverability tasks. The method further includes, for each of the rules, running a symbolic model checker to test a behavioral model of the SUT, so as to produce respective results for the rules, and computing a coverability metric for the SUT responsive to the results and the coverability tasks.